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## ORIGINAL DEPARTMENT.

### COMMUNICATIONS.

#### HEPATIC ABSCESS.

By A. L. KNIGHT, M. D.

[Read before the Meigs and Mason Counties (Ohio) Academy of Medicine.]

I shall first examine the causes that may, or that are believed to, induce suppuration and abscess of this particular organ.

Blows upon the region of the liver are considered as a cause of this disease. This I think is placed first by authors, not because of its frequency, but from the directness of the cause, and the disease consequent, for having other symptoms of the malady, this kind of evidence can be easily associated with the origin of the complaint.

This cause is very rare, owing to the secure position and protection that the organ has in its osseous surroundings, exposing but a very small portion of it to the accidents of external violence.

Authors are pretty uniformly agreed that the most frequent cause in this malady is, pus in the circulation from suppurative inflammation, either obtained in the vascular system, or brought within it by absorption. This proposition for the supposed cause of this form of abscess should never be lost to view; for having evidence of pus absorption, a fact is established that acts the sentinel, and will in the absence even of special symptoms, arouse our suspicions of the existence or approach of this disease.

I am aware that I am taxing the credulity of those who do not credit the probability, or even possibility, of pus absorption to the extent of producing abscess in other parts of the organism, owing to the comparatively greater

size of the pus globules in relation to those of the blood?

A few words upon this: The theory of pus absorption might be supported in this manner: It is known that pus globules are hollow, and perhaps capable of assuming an elongated form, so reducing their diameters as to make them absorbable. When we add to this the fact that pus has been found in the circulation in the absence of any introvascular inflammation, at least of any detected, but with external parts being in a state of active suppuration, proves almost conclusively that the pus entered the circulation by the process of absorption.

This proposition being established, the question naturally arises, what detriment results to the economy, and, if any, where will it most likely fall?

It would of course float with impunity in the larger vessels, but when it reaches the net-work of the finer structures, as the pneumatic cells or meshes of the glandular system, the tortuous and capillary nature of which would entangle a portion of this pus, carrying within it its venom, of which, perhaps, all pus holds a taint, and thus lodged, as it were, blocking up this spot in this convoluted circulation, becomes the nidus of the disease in question.

For example, experiments have proven that certain substances, as quicksilver, introduced into the crural veins of dogs and other animals, have found their way to the liver and been confined in the intricate meshes of that organ. And further, that these foreign substances have, in every case in which these experiments have been tried, produced an inflammatory action in the lobular portion of the liver, not confined to one particular loca-

tion, but, as it were, each foreign particle becoming the nucleus for this form of action variously dispersed throughout the organ.

It is not my purpose in this discussion to theorize upon the manner in which these particles reach the liver from the inferior extremities. It seems to me that BUDD has laid too much stress upon the absorption of pus from operations, wounds and ulcers of these parts of the body, for doubtless, taking an anatomical view of the process, we would be led to suppose that the absorbed venom would necessarily traverse the entire circulation, and admitting this venomous matter to be a cause of abscess, we would naturally look for this form of malady in other structures, especially in the lungs and lymphatic glands, to occur as frequently as in the hepatic gland.

But experience does not warrant this conclusion; so we are driven to the opinion that pus can traverse other tissues with more impunity, whilst it is held in check or lodged in the winding meshes of the biliary circulation. However this may be, it is sufficient for our purpose to know that pus poison is one of the principal causes of abscess in this organ, the truth of which we are not able, in the present state of our knowledge of this disease, to assert, or prepared to controvert; yet this does not preclude other causes. Of the several hundred *post-mortems* had where this disease existed, from what I have gathered of the several authors that I have perused, in fully seventy-five per cent. of them could the cause be traced to pus absorption. BUDD was of the opinion, though not so directly expressed, that even a greater percentage was due to this cause. Where other reasons were assigned he supposed it possible that the original seat of suppuration was either unobserved or had ceased to exist, and that very minute abrasions could give rise to extensive abscess.

So strongly was this author imbued with this idea of absorption, that he boldly asserts that cancer cells may be absorbed and produce cancer of this organ, and this he demonstrated or rather assured himself by personal observation.

He thinks that the frequency of hepatic abscess in India and other warm latitudes, in which we find a majority of the cases reported, is not due to excessive heat, or malarious poison, "for," says he, "did heat act as a cause we should expect to find the disease more fre-

quently among the smelters of iron and brass, and the japanners of our own country; but malaria may act as a remote cause, by primarily exciting this organ to throw into the primæ viæ vitiated bile in excess, which in turn induces inflammation and ulceration of these parts, gall ducts etc., and from which absorption engenders the disease."

If we take it for granted that glandular structures, per se, are rarely affected with suppurative inflammation, we can the more readily coincide in the above views. We must admit, however, that the inguinal and axillary glands are very frequently the seat of abscess, as are also the mammary and other glands, and that this process is destructive to their functions. But I venture the gratuitous remark, that the functions of these organs are not so frequently destroyed as we are led to suppose. I account for this by the supposition that the abscess, non-destructive, is interlobular, and not involving the functional structure of these glands, for pus could reach these interstices as readily as the gland proper. I am of the opinion that these glandular structures are in this way made the seat of abscess whether the suppurative source be benign, malignant, or specific. Still there may be some modification in this supposing that the virus may be carried either within the pus globules or in the liquor puris. Syphilologists are divided on this proposition, and it has been of some authors, JOHNSON for one, the opinion that these abscesses were the result of sympathy from their proximity to a suppurating abrasion. Is it not equally plausible that this proximity favors the idea that absorption has carried pus virus either into their interstitial vascularity, or into the lobulated portion of the glands?

That these organs are frequently the seat of suppurative inflammation from other and specific causes will not be denied, nor do I wish to raise any side issue in this present discussion, my principal aim being to impress you with the fact that pus lodgment is the principal if not the sole cause of the lobular abscess of this organ. If this position is well taken, it proves that free pus, or pus with its menstruum is the most active and prime factor when in the circulation from whatever source in this malady. Knowing this, with specific symptoms present, a diagnosis is facilitated. I believe it is generally conceded that

a suppuration once set up is capable of growth in any of the tissues, and more especially so in the vascular cell structures. The physical formation does not disfavor the idea of growth of abscess in its parts. And as before remarked, pus being a prime factor in this suppurative condition, we would naturally look for its principal strength in its proximity to this gland. Thus we see this possible and highly probable result from a suppurative inflammation in the mesenteric vessels or its cellular structure, and this would be heightened were the inflammation within the vascular coats of the portal system, pus being carried direct to the liver.

The quality of the pus doubtless would influence the character of the abscess, in regard to its rapidity of growth, its benignity, malignity or dispersion of locality; its complete divisibility in the circulation favoring a plurality of abscesses. However, we have no means of determining the special quality of the pus or its capacity of divisibility. I am disposed to think that the nearer the source of poison to the organ, the fewer abscesses should be looked for, and *vice versa*, with remoteness of source which would require the aid of the general circulation, and thereby not pass so uniformly through the same portion of the liver, or at least giving one affected spot time to set up its action with surroundings so prepared as to preclude the further ingress of pus, and thus drive it to other parts. I have no authority for the above opinion; writers, so far as I know, upon this point are silent. There are other causes supposed to give rise to this species of abscess, one of which I will notice; that is, the excessive use of alcoholic spirits. It is well known, or should be, that prolonged inebriation induces congestion, active excitation, and perhaps inflammation and fatty degeneration of this organ. But it has been shown that those who use alcoholic spirits well diluted, or in the form of the weaker wines, beer, etc., or the stronger upon full stomachs escape hepatic abscess, but are obnoxious to the other affections just named; whilst those who take it "straight," as we Yankees do, or the gin drinkers of London, may have interstitial abscess or the "hob-nail liver," spoken of by English authors—more generally the latter than the former. Yet lobular abscess may follow these latter habits, and has been known to do so.

This favors the idea that the direct irritation, long continued, of strong stimulants, induces inflammation and suppuration of the chronic form in the stomach and superior portion of the primæ viæ, and perhaps also the gall ducts from which the advent to the liver would be direct, and *modus operandi* like that given for pus absorption. I am inclined to think from my teaching, that this is a rare cause, and that the interstitial form is much more common as a result of inordinate drinking of alcoholic stimulants. The disease as it usually occurs from this cause, as well as from blows or other external violence, are not nearly so grave, and seldom destroy the lobular portion of the organ, as do those abscesses from the main cause spoken of. These comparative differences will be further considered in reviewing the treatment.

I am sorry that the limits of this article will admit of but a glance at the changes of structure that are consequent to this disease.

Observations upon the cadaver of several hundred, have shown, as we would readily suppose, a great variety of difference in appearance, number and size of the abscesses, as well as changes in the organ. The more recent the abscess with rapidity of development, the greater redness and congestion in its immediate surroundings, with the greater diffusion of lymph in a semi-organized state, whilst those more tardy were generally found sacculated, with the surroundings displaced by a yellowish hue, supposed by some to be a bilious stain. These appearances were found in the lobes of the liver.

Those occupying the vascular and interstitial portions did not cause as marked changes in the gland, except that there were various degrees or shades of color throughout the entire organ, varying from a pale yellow to a deep brown. It is worthy of remark that abscesses in other parts of the body, have been accompanied with a pale and flaccid liver.

This goes to show the susceptibility of this organ to take on diseased action and functional derangement from these causes, and perhaps favors the theory that pus is formed in the vascular system; but the prevailing opinion now is, that this degeneration of the circulating fluids produces cold abscess, with which we have nothing to do in this discussion.\*

\*Cold abscess is supposed to originate from some abnormal secretion in the lymphatic system not yet understood.

Again, the change in color is wrought by so many other influences that but little stress can be laid upon this physiological feature.

I am not able to say whether a single abscess or a plurality of them most often obtain, but as the organ has been often found studded with small abscesses, it is reasonable to suppose that a plurality of them may exist at the same time, or follow each other consecutively.

They have been found from the size of a filbert to eight or ten inches in diameter, containing from an ounce or two to several pints of pus, which is white and of the consistence of ordinary pus from abscess of other parts of the body, not claret-colored as some authors have asserted. Perhaps, as ROKITANSKY has stated, "that old abscesses are occasionally infiltrated with bile and other coloring matter," has given rise to the latter declarations.

BUDD says: "In cases that have proved speedily fatal, the abscess is bounded simply by red and softened hepatic tissue; but in others it is lined by a false membrane or cyst," and that "the structure of this cyst varies very much in different cases—depending upon the general condition of the patient." Our limits prevent a discussion upon their formation. Suppuration being a simple secretory process, we rarely find loss of structure in any part of the body that has a yielding coadaptation—pressure being necessary to induce absorption of parts of the surrounding tissues, and this we make to account for pus of abscesses making its way to the surface.

A congested or inflamed liver is not thus accommodating in its structure, and where two or more contiguous spots are in a suppurative condition, the intervening portion would be liable to pressure and absorption. This seem to be a rational way of accounting for the loss of structure.

Dr. CHYLE, of Harrisonville, Va., informs your reporter that he had seen five *post-mortems*, two in Philadelphia and three in his private practice; that there was loss of hepatic substance in one, of function in three; in the other the liver appeared healthy, except so far as the abscess, which was located in the dorsal portion of the capsule. Cause of the latter case: a blow of the fist by another "darkey"—it being a negro that had thus lost his life.

This information I received in 1848, prior to the publication of BUDD's work on the liver, published in this country. BUDD gives the symptoms thus: "They are most in accordance with the descriptions usually given when the inflammation is caused by a blow, or some direct injury without. The injury is usually done to the convex surface of the liver, and the local symptoms are well marked. There is pain and tenderness in the region of the liver, and a sense of fullness and resistance under the false ribs, from increased size of the organ. The liver becomes enlarged, and if the abdomen be flaccid, and the intestines empty, its edges can be felt some inches below its natural limit. The secretion of bile may be suppressed or deficient, and patient jaundiced."

These are given for specific symptoms, and certainly they are sufficiently specific when present and referred to this locality; they are just such symptoms as we would reasonably expect in a disease of the kind, leaving out of view causes heretofore detailed.

I learn from this same author, as well as from others, that the above symptoms are not present in a majority of cases, nor can I find any other special symptoms given. The general symptoms, febrile excitation of the circulation, dark furred tongue, pain in the right shoulder, mental disturbance, high color of the urine, and lassitude are, if we except the pain referred to in the right shoulder, symptomatic of other diseases. The pain below the right shoulder has with most writers been regarded as pathognomonic of this affection as much so as pain in the knee is in morbus coxarius; yet I infer it is not as concomitant with this, as the peculiar sympathetic cough so often spoken of by authors.

LOUIS did not regard either of these symptoms as having any special value in this case, holding that they are secondary, and oftener entirely wanting than present, in this disease. I should think some import attaches to them in connection with other symptoms and marked causes. Again, in large wounds, amputations and extensive suppurations from other sources, wounds of the abdomen, grave dysentery and the like, agents in the production of the disorder, the general symptoms would not differ from those in the disease in question. So you will see that from these latter exciting, or rather prime causes—hepatic abscess may in-



aidiously supervene, and death close the case without a suspicion of its existence. JOHN-SON, as quoted by BUDD, gives instances of the kind. In fact, in many of the *post-mortems* held, the malady has been found where no prior symptoms indicated its existence. Hence the necessity of bearing in mind the principal cause in this disease. I have no doubt in my own mind that many occult cases of death are attributable to this form of abscess, and that the disease is more apparently than actually rare. Jaundice will only occur when the suppuration involves the secreting portion of the liver.

This is only a connective symptom, for we may have jaundice from other causes. Under the same head may be recorded hiccoughs and vomiting. In superficial inflammation in the capsular portion, it has been very generally accompanied with pain under the left shoulder, increased by pressure on the region of the liver; but deeper seated abscess gives little if any pain. The difficulties attending the diagnosis of hepatic abscess, would be much better illustrated did space allow a few of the more obscure cases in detail. They would be interesting, if not highly instructive. They are interesting because they offer so many problems to solve, showing in their solution this same quotient, "pus absorption." To do this would require a volume of no mean pretensions.

The treatment in hepatic abscess resolves itself into this with the more rational practitioners: The plan adopted for suppurative inflammation in general is the only laudable course in this disease; but with our ignorance of the true origin of pus, or even of this form of inflammation, taking the various theories in review, from the elder HUNTER down to the present day, not excluding the chemical theory of Baron LIEBIG, I doubt our justification in praising any plan of treatment.

But taking a middle course in these vexed questions, a majority have recourse to tonics and antiseptics, with stomachics and bland laxatives, varying these to suit individual cases with generous diet, etc.

The foregoing plan appears to embody the sum total of a judicious treatment of abscess. The injudicious and indiscriminate exhibition of the various forms of mercury has, to my mind, been justly condemned by the popu-

lar authors in this disease; in fact, taking into consideration the cause thereof, I can see no indication whatever for its use in this complaint. If it is given with a view of relieving the organ of its congestive state, this could be done more efficiently by means equally as simple, and less depressing—namely, occasional emetics.

The habit of giving mercury in all or supposed affections of this organ is, to say the least, highly prejudicial. BUDD's objection to its exhibition in this particular is the shortness of time allowed for its effects. This objection is not so valid as the one of its absolute spanæmic effects upon the constitution, unless it can be shown that its alterative and revulsive action completely and more than compensates its evil effects, which, I think, experience has not yet shown.

Small and deep-seated abscesses may exist for years, whilst the patient enjoys a tolerable degree of health. Such instances are given.

The tendency of those situated more superficially is to extend and set up adhesive inflammation of contiguous parts and their contents, to make way to the external surface, or into the cavity of the abdomen or chest. If in the former of the last two named, death is the rule in consequence.

If the dorsal or convex portion of the right lobe is the seat of abscess, the chances are that it will discharge into the inferior portion of the right lobe of the lung, or make its way to the surface in that direction.

There are several advocates for opening abscesses of this kind, under the general and perhaps good rule of opening all abscesses when pus is detected. The objections to this practice in this particular case cannot be too strongly urged. We can never be certain to what extent adhesions (or want of adhesions) have taken place between the organ and the adjacent parietes; we are not able to determine between abscess of the concave portion of the liver and a distended gall bladder.

An abscess in transit, making its way to the surface, of course carries its cystic coverings with it, and were the course not tortuous, we might with impunity plunge a bistoury into it. If such a course is chosen, it is necessary to ascertain extensive adhesions before resorting to opening. This is done by marking with ink the periphery or margin of the liver, and

then moving the patient. If in this way the liver does not show that it is fixed, the operation is hazardous, and not to be thought of. In fact just at the time the operation can be done with safety, the case is far advanced toward recovery; coaxing with emollient poultices will then accomplish all that is required. Space will not allow a detail of other objections to the operation.

#### THE USE OF BELLADONNA LOCALLY APPLIED AS AN ANTI-GALAC- TAGOGUE.

By WALTER B. CHASE, M. D.,

Of Windham Center, New York.

Mammary abscess resulting from over distention of the lactiferous ducts is of frequent occurrence, and is alike a source of suffering to the patient and annoyance to the attendant. Every practitioner is familiar with the difficulties attending the management of the mother on the loss of her child, either on parturition or subsequently, in securing prompt and systematic removal of the lacteal secretion either by natural or artificial aids, until the functional activity of the organ is arrested or gradually ceases. It also occasionally happens that the mother, in attempting to wean her child, finds the established physiological activity of the mammary gland so persistent, that secretion continues even when its natural stimulant, nursing, is discontinued, so as to be productive of inflammation and suppuration. For some years I have been in the habit of using belladonna, applied locally, for its anti-galactagogue effect, and thus used have found it of signal benefit. My method of application is as follows: I use empl. belladon. ; cut out a circular piece of sufficient size to cover the breast, with a hole in the center about an inch in diameter for the nipple. To illustrate its use I give the three following as typical cases of the efficacy of belladon. locally applied in arresting and preventing the lacteal secretion: Mrs. C., multipara, æt. about 37; accouchment, October 1869; child survived but four or five days, dying from some malformation of the air passages. Was first called to prescribe for mother the day succeeding child's death; found both breasts swollen, hard, and very painful from distention and inflammation of lacteal vessels. The integument covering breasts

was livid, and I thought immediate suppuration unavoidable.

I carefully applied empl. belladonna, covering both breasts; within a few hours of the application marked relief from pain was experienced. The empl. was allowed to remain several days. The inflammation gradually subsided, and there was neither formation of abscess nor further secretion of milk. Her getting up was prompt and in all respects satisfactory.

Mrs. C., primipara, æt. 21; confinement, April, 1871, at seven and half months. Fetus had been dead three or four weeks prior to labor. Applied belladonna empl. six or eight hours after labor. She experienced no secretion of milk whatever, and in three weeks was about the house apparently in perfect health.

Mrs. H., primipara, æt. about 26; delivered November, 1868; continued to nurse her child until Aug. st, 1871, when she weaned it. Here the secretion continued to such a degree as to greatly extend the breast, occasioning excruciating pain, and threatening inflammation and abscess. Belladonna empl. was applied over both breasts with the happy effect of relieving the pain in two or three hours, after which no further secretion took place.

I have never failed in arresting the lacteal secretion by this method when the plaster has been of good quality and its adhesion to the integument perfect. It was a question in my mind whether the relation between the lacteal secretion and the physiological diminution in the tissues of the uterus following labor, was of such a nature as to unfavorably effect the health of the person were this function prevented or arrested; and I am happy to state, so far as I have observed, I could discover no injurious results.

During the period of *allaitement maternel*, I consider the local application of belladonna of doubtful propriety, when used in threatened mammary abscess from over-distension of the lacteal vessels, owing to the danger of absorption into the mother's system, and its toxicological effect being produced upon the child through its mother's milk. One such case of poisoning has been reported within the past few months.

While proper precautionary care will almost always enable us to avoid mammary abscess from the causes already mentioned, they are

nevertheless frequently met with from neglect or lack of knowledge of either the attendant or the patient. I consider belladonna a valuable therapeutic agent in cases like those here narrated, and I ask such members of the profession as have not thus used it to give it an impartial trial.

#### MEDICAL AND SURGICAL PRACTICE.

By FRED. E. HORNER, JR., M. D.,

Of Salem, Va.

During the past year the writer assumed the position, through the columns of the REPORTER, that the cycle for the return of epidemic fever in the Southern States had recurred. The history of this form of disease in that section of our country confirms the correctness of this observation. Intermittent, remittent and yellow fever have been most prevalent, and the last named have proved to be very violent and fatal in the tide-water and paludal districts. It is a singular coincidence that the fevers which now prevail in summer, and variola so common during the present winter season in the northern latitudes, were common in the United States in an epidemic form in 1827 and for several succeeding years.

These fevers generally occur in alluvial level districts interspersed with swampy spots in which the water courses usually head. They are of marsh origin, partake of the laws of periodicity, are alike limited in their course, and are controllable by the various preparations of cinchona. As in the exanthematous and congestive fevers, the temperature of the body is increased sometimes as high as  $112^{\circ}$  in warm climates.

In Gloucester county, Va., and on the borders of Chesapeake bay nearly every third person appears to have suffered from malaria during the late summer. Unluckily for many they are wont to buy a certain quantity of quinine, which fails to cure the ague because taken in the form of simple powder, and is insoluble without the aid of acid. sulph. comp. Some add whisky to the quinine. In one instance a young man informed me that he had taken four ounces of quinine without any relief, and he had acquired a taste for ardent spirits, by reason of the combination with whisky. Farther south, in Louisiana particularly, many have died in the stage of congestive chill.

The timely use of mercurial laxatives, mild salines and quinine, and regulation of the diet, rarely fail to relieve fever of malarial origin. During the present epidemic a relapse not unfrequently occurs in the winter or spring season, due to an imperfect cure, the extremes of cold weather and high electric tension of the atmosphere—the latter being a prolific cause, also, of the most painful nervous symptoms, especially among that class of sufferers who complain of constipation of the bowels and neuralgia.

Jaundice, in this locality since the late war, has in several instances been the precursor of a fatal attack of malignant cancer, attacking either the liver, stomach, face or breast. Two of the liver, two of the stomach and one each of the face and mamma have occurred in my practice within the past five years. Malnutrition, the lack of proper food and hereditary predisposition contributed to the production of these diseases, not one of which proved to be amenable to treatment. Suitable local remedies were employed, chloral hydrate internally and anodynes in the hypodermic form were used with great advantage to the patient. These limited data appear to furnish an exception to the rule which holds in England, viz: that "cancerous disease is of more frequent occurrence among women than men." Thus it has been found that of the 11,662 persons who, during a period of five years, died from it, there were 8,746 women, and 2,916 men.

My practice presents an example of perforation of the bowels and walls of the abdomen, by the presence of an *ascarus lumbricoides* in the intestines, causing ulceration and abscess, and the subsequent escape of these parasites. It occurred in the person of a negro boy, who was neglected for three weeks, and had been treated in *ante bellum* times by poultices, etc., for ordinary abscesses, by his master, until the true cause was developed, and a physician called in. An additional interest connected with this case is, that I have had under treatment recently the child of the boy now developed into manhood—affected by worms. When suitable treatment with calomel and *ol. chenopod* had been instituted, this child discharged the worms in large masses and in great numbers.

Prof. WOOD, in his "Practice of Medicine," says: "It has been supposed that worms are

capable of piercing the intestine, and escaping through its parietes. As they have sometimes been found engorged in small openings in the coats of the alimentary canal, and even loose in the abdominal cavity. They have also been discharged with pus, from external abscesses, connected with the bowels."

An easy method to reduce a dislocation of the humerus, I have found to be to require an assistant to place a large key or dumb bell, wrapped with a roller, in the axilla of the limb affected, and to clasp the patient round the body, while the surgeon draws forcibly the arm downward toward the trunk of the body, and, then, after suitable traction and elevation, restores the joint to its socket. When other methods have failed this has proved successful. My friend, Dr. BENJ. LEE, of Philadelphia, did me the favor, several years ago, to explain his method in the mechanical and therapeutical treatment of tuberculosis of the spine in children. I have never failed to improve the condition of this neglected class of patients, and at the same time diminish the deformity by the careful application of the various mechanical appliances recommended by this distinguished surgeon.

#### UNIVERSITY OF PENNSYLVANIA.

Service of PROF. D. HAYES AGNEW.

[REPORTED BY DE F. WILLARD.]

##### Hernia.

Several cases of rupture, which have come in this morning, give me the opportunity of making some remarks to you upon the important subject of hernia, using these cases as illustrations.

Hernias, or protrusions of the abdominal contents, may take place in various directions, and are named, from their points of exit, umbilical, femoral, ventral, sciatic, diaphragmatic, etc., etc.

The most common form in males is the spermatic or inguinal, which, when complete, becomes scrotal; in females, the femoral.

Let us take an inguinal hernia. It is "acrotal," as I have said, when it is fully formed; it is "concealed or incomplete" when it is still in the canal, not having emerged at the external abdominal ring; it is "direct" when it comes through the abdominal wall's against the external ring, or inside the deep epigastric artery; it is "indirect" when it traverses the canal, having entered to the outside of the above mentioned artery. What is the anatomy of this region? There are the cov-

erings of the abdomen with which you are all acquainted, the skin, superficial fascia, external oblique, internal oblique and transversalis muscles, transversalis fascia and the peritoneum.

The testicle was formed beneath the kidney, but at the seventh month of fetal life, descended to its final position in the scrotum. Its route was through the abdominal walls, and although nature afterward sealed up the parts as well as possible, yet a weak point still remained, into which an intestine may insinuate itself at any time. When nature does not close these openings we then have a "congenital" hernia, but all others are "acquired."

This weak point in the transversalis fascia, then, we call the internal abdominal ring; in the aponeurosis of the external oblique muscle, the external abdominal ring; and the passage way between them, the inguinal canal. The external ring is strengthened around its inner and outer margin by a thickening or aggregation of its fibres, just as a button-hole is supported, and these two processes are called the pillars or columns of the ring. Between these columns there is thrown in a mass of connective tissue to fill up the space, and certainly this could receive no more appropriate name than "inter-columnar fascia." This ring is situated above and to the outside of the symphysis pubis. The internal ring is midway between the symphysis and the anterior superior spinous process of the ilium, two inches from the external ring, and three-fourths of an inch above Poupart's ligament. It is not, properly speaking, a ring, but is merely a depression or thinning of that connective tissue which binds the transversalis muscle to the peritoneum, the transversalis fascia. It receives additional support from the overlying fibres of the internal oblique and transversalis muscles. The inguinal canal is the space between these two rings, and transmits the spermatic cord in the male and the round ligament in the female. It is bounded in front by the tendon of the external oblique, superficial fascia and skin, and also at its posterior portion by some of the fibres of the interior oblique as they arch over from the outer part of Poupart's ligament to be inserted into the symphysis; behind by transversalis fascia and the united or conjoined tendon of the internal oblique and transversalis muscles; above by these before mentioned arching fibres of the internal oblique and transversalis; below by Poupart's ligament.

Now this is the route taken by a hernia, and it is perfectly plain to see what its coverings must be. They are merely the structures making up the walls of the abdomen, pushed before it just as you would push your finger through an elastic membrane and elongate it into the form of the finger of a glove; protruding then from within it must take, first, peritoneum, forming its "sac;" next, the tissue filling the internal abdominal ring—the transversalis fascia, which



being delicate, yields, and is prolonged finally into a funnel-shaped pouch, which is called infundibuliform fascia. Now it meets the next structure, which is the transversalis muscle, and this, together with the internal oblique which is closely connected with it, is also pushed down and a few of its fibres continued over the pouch—forming what is known as the cremaster muscle. It is now in the canal, and meets no resistance save the separation of the muscles, which it easily accomplishes. It then reaches the external abdominal ring, which it finds closed by the intercolumnar fascia, but which it takes before it. This was at the opening in the tendon of the external oblique, so that we have no other coverings save superficial fascia and skin, and these offer no resistance.

It is now at the surface, and we will sum up its coverings. Peritoneum, infundibuliform fascia (obtained from the fascia transversalis), cremaster muscle (from the transversalis and internal oblique muscles), intercolumnar fascia (in place of the external oblique muscle), superficial fascia, skin—six in all. The infundibuliform fascia will not constitute a covering when the protrusion has been rapid, since it gives way quite easily; but when gradual it may be elongated.

In the other variety, *i. e.*, direct inguinal hernia, the intestine (or omentum) takes a little different route, that is, it comes through the external ring from behind, without passing down the canal; but its coverings are only slightly different. It has peritoneum and transversalis fascia as before, but when it comes to the next layer, being so near the median line, it no longer finds the fibres of the transversalis and internal oblique muscles, but their aponeurosis, which is known as the "conjoined tendon," so that it now takes this tendon in place of fibres, which were called cremaster muscle. The external oblique muscle is the next layer, but it has an opening in it which is closed by the intercolumnar fascia, and now the coverings are the same as before. The only difference is, then, in having conjoined tendon in place of cremaster muscle; yet I believe that this tendon is rarely a covering save theoretically, for it is so tough and dense that a hernia would much more readily pass downward a little, and then beneath its lower border, coming up again to the ring, than it would pass through its substance. Practically, then, it is not a covering.

Now you ought to understand the anatomy of a hernia thoroughly, if you have followed this demonstration carefully. How will you recognize such a protrusion of any of the abdominal contents? First, by the location of the swelling, by the manner of its formation, by a slight sense of pain, by its increase in the erect posture and disappearance in the supine, and especially by the succussion imparted to your hand when the diaphragm is forcibly drive downward by a sudden cough. It is also doughy to the feel, and not as decidedly fluctuating as an abscess or bubo, which might occupy this region.

When the tumor has reached the scrotum it might be confounded with hydrocele and varicocele, but the former of these commences from below, is pyriform in shape, is more elastic, rebounds when pressed back between the thighs, and is translucent. Varicocele is much more knotted and irregular, and although it disappears when the patient lies upon his back, and reappears upon rising, yet these actions are much more gradual, and, moreover, a finger placed upon the external ring will entirely control a hernia, while it will have but little effect upon the varicocele.

The mistake should never be made, yet you will often find varicocele patients wearing a truss for hernia.

What are the dangers in hernia? That the contents may become constricted or strangulated by swelling or contraction about the neck of the sac; and it is because this danger is ever in operation that these ruptures cause so many deaths in our population. It should, then, be prevented from descending, and this is accomplished by means of an accurately fitting truss. There are but few cases which cannot be benefited by such an instrument, and when it has failed to accomplish this purpose, I have almost invariably found that the adaptation was faulty.

A temporary truss may be made with compress and roller, but when intended for constant use, they are made by regular instrument makers of steel or rubber springs with pads of deal wood, cork, or leather stuffed with hair. The one which I prefer is the hard rubber one, since it is very light, can be readily cleaned, permits the patient to bathe himself without removal, is perfectly non-absorbent, lasts a lifetime, and by slight heat can be altered into any required shape. Its only objection is that it is more costly, and that in lean, old people its non-absorbent property renders the underlying parts more apt to become macerated and sore; yet even this might be obviated by a temporary sheath of leather. The steel spring trusses covered with leather, must absorb dirt and perspiration, so that they become very foul after a time. The wooden pads are preferable on this account, and they are just as comfortable after a few weeks. The pad should be oval and should fit accurately upon the canal at the external ring, and it is not advisable to have it adjustable, for the patient may attempt to regulate it himself, and do great mischief.

See that a hernia is completely reduced before you apply a truss, which should always be done in the supine posture; adjust accurately, and then, seating him upon the edge of a chair with his limbs slightly separated, compel him to cough. If it does not make its appearance, you may know that the truss fits.

Once on, the hernia should never again be allowed to descend, but the instrument may be

removed every night and thoroughly cleansed while the parts are freely rubbed with soap liniment or alum and whisky. It must be reassumed *before rising* in the morning, for after a time the tendency to strangulation seems to be greater if the gut is allowed to escape, and the patient should always have an extra truss on hand for use in case of breakage, etc.

Of course it is not to be expected that a cure will be effected in adults, but strangulation may thus almost certainly be prevented. An ill-fitting truss, however, may do great harm by converting a reducible hernia into an irreducible one. In children under three years of age, all hernias may be said to be curable by this instrument, and even in youth this happy result may sometimes be accomplished. How soon should you put on a truss in cases of congenital hernia? As soon as it is discovered, and the sooner the better the chance of cure. Wash and stimulate the parts, and the compression can do no harm if it is carefully watched. While speaking of this subject, let me digress a moment to speak of the umbilical hernias so often met with in infants, and which are perfectly curable by well-adjusted pressure. A simple compress may be tacked to the binder, or, what is better, a piece of cork covered with leather, and held in position by adhesive strips. The umbilical trusses of the instrument makers are faulty and injurious, for the little conical elevation, which is made to fit into the opening, must, by its pressure, only tend to enlarge the ring, and render the condition worse than before. It should be flat.

An irreducible hernia is one in which the contents, whether intestine, omentum, or both, cannot be returned to the cavity of the abdomen. This may be temporarily occasioned by the presence of gas, or feces, or by inflammatory changes at the neck of the sac, or by adhesions between the contents, or by an intestine passing through a rent in the omentum in cases of entero-spi-loclele—or by injuries.

This form is likely to become inflamed or strangulated, and its reduction should be immediately attempted, but this should not be too long continued, for fear of injury to the sac or its contents. If it will not disappear, it is better to wait (provided symptoms of strangulation are not present), and put the patient upon his back, apply a few leeches over the cord, followed by cold lead water and laudanum to the tumor, with one-half grain of opium every three hours, internally. If no urgent symptoms arise, it is best to wait until the sensitiveness of the part has disappeared, when taxis may be again attempted. In making taxis, the greatest gentleness is always to be used, the precaution being taken to first draw the tumor well down away from the constricting agent, in the line of the canal, so as to elongate the mass, and thus diminish its caliber. The pressure and various manipulations should all be made with a definite aim and object in view, so that no unnecessary

handling shall be required. Should it remain unreduced, however, and the constricting band become tighter, strangulation will follow, the circulation of the part be seriously impaired, and if not relieved, gangrene and sloughing must ensue. Now the case must be carefully watched, and if the symptoms become severe, relief must be immediately applied. The prominent symptoms are, local sensitiveness, gripping pains in the umbilical region, tympanites, tenesmus, constipation and nausea.

These continue until vomiting sets in, which is persistent until, if no feces pass per anum, it may become stercoraceous. This vomiting may cease after a time, but should only be regarded as favorable when the other symptoms are also improving. The constipation is obstinate, unless there be a previous accumulation in the lower bowel or when the hernia is simply omental. Pain in the tumor may finally cease, but this is a dangerous, rather than a favorable sign, for it is indicative of gangrene, in which case the pulse may become feeble, the surface cold, and the countenance anxious. The tumor when strangulated does not receive the succussion of the diaphragm, and this fact will enable you at times to decide upon the seat of stricture by observing closely the point at which such motion ceases to be perceptible.

As soon as these symptoms make their appearance taxis should be thoroughly tried (the patient being thoroughly etherized) for half an hour; gravity should be also brought into use by elevating the hips of the patient or by placing him upon his shoulders and knees. This failing, your course will depend upon the severity of the symptoms; if they are not dangerous a delay may be safe. Place the patient in the recumbent posture, with the thighs flexed and the hips elevated, while the tumor is freely surrounded with ice bags, and the lower bowel washed out with an enema. Opium should also be administered in sufficient quantity to produce quietude, say one-half grain every one or two hours, in combination, if you choose, with one thirty-sixth grain of ant. et pot. tart.

If vomiting be persistent the rectum may be used. Under this treatment many hernias will slip back into the abdomen of their own accord, and the symptoms disappear. Should this not occur and the symptoms remain, especially if vomiting become stercoraceous, no time is to be lost, for I am satisfied that many lives are sacrificed by the hesitancy and procrastination of surgeons. Not that I would advise you to hasten to the operation in every case, but simply that you may be on your guard against delay which may be fatal. Herniotomy is an operation with which every physician should be acquainted and fully competent to perform at any moment—since patients might easily die, or intestines become gangrenous, while surgical aid is being summoned. It is an operation

easily performed, provided the anatomy of the parts is recalled, and I trust none of you will permit patients to die unrelieved, provided you are called early in the cases. In many instances, violent attempts at reduction have probably been made by the patient himself, and you will find the case one of inflamed strangulated hernia requiring immediate relief. The operation, to be of service, must be done before gangrene commences. The incision is to be made through skin and superficial fascia, in the line of the canal and directly over the prominent portion of the tumor.

There are no arteries here except the superficial epigastric, which if cut can be ligated. The inter-columnar fascia is the next covering, as you will remember, but you must not expect to find these layers perfectly and accurately stratified, for in old cases these parts have become so thoroughly agglutinated and bound together, that they have really become as one, and you will be able to recognize no special structure until you come to the peritoneum, which is always the sac. You may see some of the cremasteric fibres, however, but the transversalis or infundibuliform fascia is seldom distinct, even if it exists at all. Even the peritoneum itself may be so altered and thickened as to be difficult of recognition, but its tense, smooth, semi-translucent appearance, and avobescent vessels differing materially from the superincumbent structures, will be your guide. You will cut down slowly, therefore, until you come to the sac, lifting each layer carefully upon the director and dividing it with the scalpel. The seat of stricture may be at either of the rings or in the neck of the sac itself. If it is at the external ring you may be able to reduce the hernia without opening the sac at all, and this should always be attempted provided you are sure that the contents have not become gangrenous from too long incarceration. You will then carefully pass your finger up to the ring, and having the nail beneath its edge, slide up a probe-pointed hernia bistoury along the palmar surface, keeping the edge slightly pressed against and concealed by the finger, until it is under the constricting band. Its edge will now be turned against this tense band, and the retained finger used to gently press upon its back until you hear the fibres giving way. It is sometimes recommended that a grooved director be inserted, but I believe that the nail is a much safer instrument. It is not necessary to make an extensive incision into the band, but merely a slight cut, for the finger can accomplish the rest by dilatation or tearing to a sufficient extent to permit of the reduction by taxis.

Should this be ineffective however, and the constriction exist in the neck of the sac, or if there is any doubt as to the vitality of the contents, a small portion of this sac must then be pinched up and carefully nicked, just sufficiently to permit of the introduction of a grooved director, when it can be freely slit up, and

the contents examined. The finger is now passed up and hooked beneath the constricting band, wherever it may be, which is divided as before described. In many cases it will be at the internal ring, but you must remember that this ring will not be at the normal distance from the symphysis, for it has been dilated and dragged down by the long distension so that it has approximated the external one quite closely. The spermatic cord is usually behind the sac, the epigastric artery behind and to the *inside* in indirect hernias; to the outside, in direct. This artery is the only one which is in danger of being injured, and to avoid this danger, it is well to use a knife which is not very sharp, so that it may slip before it and make the incision but slight and upward and outward, in the line of Poupart's ligament. The question of reduction will now depend upon the condition of the contents, and this must be determined by the color and general appearance.

In the first place, the omentum and intestine should be carefully separated and untwisted since if returned *en masse* the omentum might still constrict the bowel subsequently. If a minute portion of the intestine only is gangrenous, it may be picked up and ligated, both ends of the ligature being cut off, and permitting it to ulcerate its way into the intestine at its leisure. The omentum being of lower grade of vitality, and receiving a less supply of blood, should not be returned when in a doubtful condition, since it is very apt to slough. The gangrenous portion may, however, be ligated and cut away, the ligature being left hanging out, and the omentum made to heal in the wound. Even if the omentum is indurated and thickened, it should not be reduced, since it is likely to set up peritonitis. The intestine, however, will frequently live even when congested, but if gangrenous to any great extent, it should be slit up and allowed to remain in the wound, after freely dividing the stricture, the only endeavor then being to form an artificial anus without inducing peritonitis.

Any adhesions that may exist between sac and contents, or between contents themselves, must be carefully broken up, great caution being used to prevent tearing of the viscera.

Reduction being deemed advisable then, the opening already made is enlarged with the finger, and taxis gently applied until everything has passed within the internal ring.

The wound is now to be closed with interrupted sutures and compresses and spica bandage applied. The patient is to be kept perfectly at rest, and sufficient opium given to keep bowels and constitution perfectly calm and quiet for six or eight days. After this time the bowels may be gently opened by a small dose of castor oil, assisted by a full enema. Liquid diet only should be used, consisting principally of milk and beef essence.

After five days there is but little danger from peritonitis. Should this occur, however, at any



earlier date, turpentine stupes should be immediately applied, followed by cloths wrung out in hot water and covered with oiled silk. If there is much tympanitis it is better to give a turpentine injection on the second or third day, and even a little castor oil rather than permit the flatus to remain. Leeches may be applied to the part and the opium, increased; in short it should be treated as any other peritonitis. Of course this patient must ever afterward wear a truss.

## MEDICAL SOCIETIES.

### EAST RIVER MEDICAL ASSOCIATION OF NEW YORK.

[REPORTED BY W. J. PURCELL, M. D.]

At a recent meeting of the association Dr. ROBT. BARRY presented a case of unusual interest, the history of which is as follows:

#### Foreign Body in the Air Passage.

On the first of June a gentleman, while at dinner, received a piece of bone into his mouth, along with a spoonful of soup which he was eating. There being a large company at the table, he did not like to remove the bone from his mouth, so made an attempt to swallow it. This was followed by symptoms of strangulation of so severe a nature as to necessitate his immediately leaving the table. After gaining his room he made several violent attempts to eject the bone, but without success. It seemed, however, to change its position, as he experienced great relief. A short time afterward symptoms of discomfort again arose in his throat; so, improvising a probang by tying a bit of sponge to a flexible stick, he stood up before the mirror and succeeded in pushing it away *somewhere*, as he felt no longer any disagreeable indications of its presence.

In the course of a few weeks after this occurrence his general health began to decline, he lost strength and flesh, a troublesome cough set in and he suffered much from night sweats. Having always been a perfectly healthy and robust man prior to this time, with no history of phthisis in his family, he refused to believe that his lungs were affected, but attributed his illness to a cold which would wear away in time, and declined to consult a physician.

At length he was suddenly seized with an acute attack of some kind. He had severe pain in his right side; this however did not confine him to the house; he still kept about as usual. The attack was probably one of pleuro-pneumonia. Finally, Dr. Barry was summoned to see him. He found him presenting all the signs of phthisis, and on examination found a considerable cavity at the apex of the right lung. The patient evidently did not attribute his condition to the swallowing

of the bone so long before, for at this visit he did not mention the circumstance to the doctor at all, or only to casually speak of it. At a second visit, however, made a few days later, he found the patient sitting up and much more cheerful than at his previous visit.

He then produced the piece of bone, saying that "he had now got rid of the cause of all his trouble." The bone measured about half an inch in diameter each way, and was very rough and sharp. It had been expelled by coughing.

The chief question of interest now came up. Where had this piece of bone been located during the seven months which had elapsed since it was swallowed, and what connection was there between it and the present condition of the right lung? Was it lodged just above the rima glottidis, until he pushed it through with the probang into the trachea, and had it then descended into the right bronchus, and so worked its way into the lung? or had it been in the cesophagus and ulcerated its way through into the air-passages, or had it been in the stomach all this time?

The case was a curious one and afforded a good field for investigation; and what was the probable prognosis?

Dr. Blume thought it strange that there had not been more spasm of the larynx at the time the bone was swallowed. He thought it not improbable that the man would now recover his previous good health and freedom from all tendency to phthisis. His present hopefulness, etc., were all in his favor. He remembered a case of a man who had a cavity in one lung, who almost entirely recovered. The treatment which improved nutrition would, he judged, be most appropriate.

Dr. Skiff thought that if the bone were in the stomach it would show evidences of the action of the gastric juice; while if in the air passages, the laryngoscope would discover evidences of irritation. He was inclined to think it had been in the stomach, for in the act of swallowing, the epiglottis would of course be closed, and the bone could not have passed into the larynx. In the case of Mr. Brunel, the English engineer, the case was different; here the epiglottis was open and the coin passed directly into the larynx. He did not see how the epiglottis could be open when the soup was passing over it.

Dr. Barry said it could not have been lodged in the cesophagus, as it would have interfered with the act of deglutition afterward; and had it passed into the stomach it would have been dissolved in the gastric juice or voided in the stools. Dr. Raphael took this view of the case, and said that it would be almost impossible for so small a bone to remain long in the stomach and not pass through the pylorus. He remembered a case of a man who swallowed a fish bone which passed into the bowel, and first attracted attention by the pain it caused in passing through the rectum. The discussion was participated in by all



the members present, and the prevailing impression was that the bone had been lodged somewhere in the air passages, though a difference of opinion existed as to precisely where or how.

#### Chloral Hydrate.

DR. WM. NEWMAN read a paper on this substance, being chiefly a record of cases in which he had administered it successfully. In a case of delirium tremens he gave twenty grains every half hour, with the happiest result.

Was called to attend a man æt. 40, suffering from acute rheumatism, unable to move; had no sleep for four days; pulse, 130; gave chloral hydrate, twenty grains, combined with one grain extract of colchicum every two hours, until good sleep was procured; afterward continued the colchicum alone, until the bowels were freely moved.

Gave twenty grains to a lady almost mad with neuralgia in the head, every hour until she slept; woke up in the morning perfectly free from pain.

In painter's colic it is a valuable remedy. Gave forty grains in one dose; in half an hour the pain was completely gone.

In dysmenorrhea, the doctor gives chloral in combination with belladonna, twenty grains of the former to one-sixth grain of the latter; in one case the patient slept seven hours, and when she awoke the catamenia was flowing freely without any pain.

Used it in puerperal mania; had a case of difficult protracted labor, in which the pains were exceedingly severe; gave twenty grains every half hour, and kept the patient under its influence during labor with complete success.

The doctor, however, advises caution in the use of chloral, and would by no means advise the use of it indiscriminately. Several physicians condemn it altogether, and one leading surgeon in this city has reported several deaths from the use of it.

Dr. Franklin mentioned a case of strangulated hernia in which all the efforts at taxis proved ineffectual; gave the patient one drachm of chloral in one dose, and after an hour twenty grains, repeated every half hour until the patient sank into a deep slumber. The parts were relaxed so thoroughly that reduction was effected at once.

The action of the drug is very similar to morphia or opium, except that it leaves no after trouble or any bad results. He has used it successfully in neuralgia. Its physiological effects are productive of sleep, insensibility, relaxation of muscular fiber, and reduction of temperature. The medicine of course being indicated when any such result is desirable.

Its action appears to be first on the cerebro-ganglionic cells; secondly, on the spinal ganglion, and thirdly, the ganglion of the heart. The causes are chemical, being the slow formation of chloroform in the blood, inducing in-

creased fluidity and alkalinity. Its final action is on the heart.

Dr. Thorns says chloral is contraindicated where the blood is in a toxæmic condition; in this case all anæsthetics are dangerous, especially when the blood is charged with foreign matter.

Dr. Blume does not agree with Dr. Thorns as to the latter statement. He has seen chloroform administered in convulsions from uræmic poisoning with benefit. He does not consider disease of the heart as contraindicating the use of chloroform, and quoted Dr. Simpson's statement, that patients had been brought into the hospital in England before chloroform was used, who died from the administration of small doses of medicine. Dr. Burke thinks chloral a safer remedy in delirium tremens than opium, and always gives it now in preference, every two hours until sleep is obtained. Gives it in neuralgia, and when the pain returns gives quinine also.

Dr. Raphael has used hydrate of chloral in various cases with a doubtful result. In some the action of the medicine was decidedly beneficial, in others the result was negative. In dysmenorrhea, and convulsions, and delirium tremens, he found it very useful, but the quantity given was enormous, and he thinks such large doses very dangerous.

The doctor recommends a combination of chloral and chloroform, in the proportion of from five to ten drops of the latter to a drachm of the former, with syrup of ginger to flavor it, viz.:

R. Chloral hydrate,	ʒij.	
Chloroform,	ʒi. xx.	
Syrup. zingib.,	ʒij.	
Aque.,	ʒij.	M.

Sig.—One teaspoonful.

The medical profession is losing confidence in the drug and do not prescribe it now as frequently as heretofore. He has used it externally in cases of extreme facial neuralgia with a highly favorable result, and thinks it safer and more beneficial used in that way than when taken internally.

#### Small-pox in Berlin, etc.

We learn from the *Allgemeine Medicinische Central Zeitung*, Dec. 2, 1871, that the small-pox is epidemic in Berlin to such an extent that daily reports were ordered. In one day 67 persons were reported taken sick with it, and 20 deaths. In Gotha, with a population of 20,000, the new cases were 25 daily and the percentage of deaths very large; in one month over 300 fatal cases.

—A woman at Northampton gave birth to four children recently, and at last accounts the mother and all of the children were doing well. This makes seven children which she has had in thirteen months.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### The "Cottage System" for the Insane.

Dr. KIRKBRIDE, of Philadelphia, notices this system as follows in his last report of the Pennsylvania Hospital for the Insane:

The idea of having "groups of houses for insane men and women near each other," with entire freedom of ingress and egress, will hardly commend itself to many of those who know much of the peculiarities of not a few of the insane, or to those who think of this arrangement as applied to individuals in whom they feel a particular interest, especially if these be their wives or daughters, mothers or sisters. In other reports I have stated my views, derived from a practical test of both plans, in favor of a real separation of the sexes, among the insane. The true mode of securing to the male patients the humanizing influence of female society is not to have them associate with women who are also insane, but to have employed in the male wards of every hospital just as many ladies of suitable age and character, with cultivated minds and attractive manners, as may be deemed desirable.

There is something very attractive to those who have not given this subject much consideration, in the title of the "family" or "cottage system," as distinguished from that of the hospital proper. And yet with a complete classification a well-arranged hospital has a separation into families practically about as distinct as it would be in detached cottages, and yet retains many advantages that result from their closer proximity to each other. This is especially so in regard to all the modes provided for occupation and amusement, and, above all, for supervision.

It has been proposed to have as many as forty patients in one of these families. It might reasonably be objected that this number, with the necessary domestics, even in private life, would make a family of rather awkward dimensions, and bear little resemblance to the ordinary family circle. Even one-half this number would be a large family, and the fourth of it, unless composed of persons of congenial feelings, might be more than was agreeable, especially when removed from the proper kind of supervision.

The great charm of the real "family" does not come, however, from the small number of individuals in it, but from the relations of those who compose it—parents and children, wives and husbands, and friends, with a community of interests, and not from being a collection of strangers, with separate interests and feelings, each intent on his own gratification.

This proposed "family system," no matter what size is adopted, must necessarily be much more like an invalid boarding-house, than a family in the proper sense of the word. The great objections, however, to the whole arrangement, are that you take away the facility of supervision—which is sure to be more or less neglected, according to the character of those who manage the establishment—responsibility is shifted from officers to subordinates—and these often require as much supervision as the patients themselves—while the risks of accidents of various kinds, especially of escapes, personal injury, and of fire, are greatly and unnecessarily increased.

My own experience with cottages and detached buildings, even at very short distances, long since led me to the conclusion that no building to be occupied by patients should be so far removed from the main structure as not to be connected with it by a covered way, well lighted at all times, and comfortably warmed in winter.

I have never been able to discover, in these proposed changes, any advantage for the patients that could at all compensate for the positive advantages, nor have I been able to learn how there was to be, from such an arrangement, any diminution of restraint, increase of comfort, or economy, either in first cost or subsequent management. The first, if attained at all, could be only by dispensing with what ought not to be dispensed with, the latter by placing the patients under the almost absolute care and control of those who could hardly be regarded as specially fitted for such a responsibility.

#### A New Method of Plugging the Posterior Nares.

Dr. HENRY MANFRED late Surgeon 22d Ky. Inf., Cincinnati, O., writes to the Cincinnati *Lancet and Observer* of a case of epistaxis. I tried injections of Monsel's salt, sulphuric acid, nitrate of silver, and others, "*et id omne genus*," and applied ice locally, with plugging of the anterior nares; but all was alike futile. The unfortunate fellow had a *hemorrhagic diathesis*, and would bleed in spite of all these remedies perseveringly applied; he was, in consequence, getting weaker and must soon die. But the blood would still percolate from the floor of the posterior nares into the stomach, from which it was ejected by vomiting. What was to be done? The hospital had no instrument among its supplies for plugging the posterior nares, and before one could be procured from Cincinnati the man would be dead.

Necessity is the mother of invention. While racking my brains in order to meet this emergency, my eyes fell upon a pair of army

stogies, under the bed, with leather laces. The idea at once struck me that this was the very thing that I needed, and quick as thought I proceeded to execute it, by pushing the leather thong carefully along the floor of the right anterior nares until the end protruded through the posterior opening, trailing upon the epiglottis and producing cough; this loose end was secured by the forceps and drawn out through the mouth, and after attaching there to pledgets of lint saturated with astringents, it was drawn back again, until the right posterior nares was effectually plugged and tied in front; the same process was repeated with the left posterior nares, and in half an hour the hemorrhage was stopped. It gave me intense satisfaction to finally succeed in plugging the right and left posterior nares, by such a simple though effective instrument, and in conclusion, I can heartily recommend this plan to any of my medical friends who may be similarly situated, from its simplicity, effectiveness, and practicability.

#### Traumatic Tetanus Treated with Chloral Hydrate and Electricity.

Dr. HAMILTON GRIFFIN details the following case in the *American Practitioner*:

On the 19th of July I was called to see Margaret Johnson, aged twenty-one years, mulatto, occupation laundress, constitution very robust; found her suffering from frightful tetanic spasms, with complete opisthotonos; the jaw firmly locked, the muscles about the jaw perfectly rigid, with risus sardonicus. These spasms occurred every ten minutes. During the interval the patient was enabled to open the mouth far enough to allow a teaspoon to be inserted between the teeth, but the abdominal muscles were corded and painful. She also complained of severe pain at the ensiform cartilage. Ordered chloroform to be administered by inhalation.

Inquiry elicited the following history: On the 18th day of June she stepped upon a piece of glass, which inflicted an incised wound about three-fourths of an inch in length, and about the same depth, on the inner side of the plantar surface of the left foot. This wound suppurated, and continued painful until July 10th, when Dr. W. T. Owen was called to see her, and found her jaw stiff; tonic spasms extending to neck, abdomen and back. During the spasms all the muscles in these regions were involved. There occurred risus sardonicus. The muscles most firmly contracted were the sterno mastoid, rectus abdominalis, and obliquus internus. There was no febrile disturbance, but she complained constantly of pain at the ensiform cartilage and in the right inguinal region. Dr. Owen ordered her to take one-half grain of calabar bean every half hour until she had taken four grains. This treatment produced no

effect. He then ordered twenty-grain doses of chloral hydrate every four hours while awake. This treatment, with flaxseed and opium poultices to the wound, produced muscular relaxation and relief of pain.

July 17th, Dr. Owen discharged the patient for disobedience of orders and neglecting to take her medicine.

July 20th, having heard from Dr. Owen of the beneficial results which followed the use of chloral, I ordered fifteen grains, combined with one-fourth grain muriate of morphine, every four hours; chloroform inhalations to be used during spasm.

July 20th, six P. M., pulse and temperature remain normal; spasms occur every six hours; muscles slightly relaxed, but opisthotonos complete during paroxysm.

July 21st, called in Prof. J. W. Holland, who applied the continuous galvanic current by means of Stohrer's battery. The current produced muscular relaxation and relief from pain in fifteen minutes.

July 22d, pulse and temperature normal; no spasms since last visit; pain as before; mouth opened one-fourth inch with great difficulty. The chloral, morphine and galvanism were continued for several days, when the patient was discharged cured.

I have seen during the last fifteen years thirteen other cases of traumatic tetanus; all of which proved fatal; but in every case the tetanic symptoms came on in a few days after the reception of the wound, and were violently acute from the commencement. The difference between the case in this report and the fatal cases is that tetanus did not make its appearance until twenty-two days after the reception of the injury, and then it began in a mild form; no opisthotonos being observed until nine days after tetanic symptoms occurred. It is my opinion, based on a study of these cases, that where tetanus comes on in a short time after the reception of an injury, where it assumes a violent and acute form, the patient will die in almost every instance. Where tetanic symptoms are delayed a considerable time, and on appearance are of a mild or subacute form, the patient will almost invariably recover.

#### The Inconsiderate Prescription of Alcoholic Liquors by Physicians.

The following curious document, signed by three hundred of the leading physicians of London, appeared in the papers of that city just before Christmas:

"As it is believed that the inconsiderate prescription of large quantities of alcoholic liquid by medical men for their patients, has given rise, in many instances to the formation of intemperate habits, the undersigned, while unable to abandon the use of alcohol in the treatment of certain cases of disease, are

yet of opinion that no medical practitioner should prescribe it without a sense of grave responsibility. They believe that alcohol in whatever form should be prescribed with as much care as any powerful drug, and that the directions for its use should be so framed as not to be interpreted as a sanction for excess, or necessarily for the continuance of its use when the occasion is past. They are also of opinion that many people immensely exaggerate the value of alcohol as an article of diet, and since no class of men see so much of its ill effects, and possess such power to restrain its abuse, as members of their own profession, they hold that every medical practitioner is bound to exert his utmost influence to inculcate habits of great moderation in the use of alcoholic liquids. Being also firmly convinced that the great amount of drinking of alcoholic liquors among the working classes of this country is one of the greatest evils of the day, destroying—more than anything else—the health, happiness, and welfare of those classes, and neutralizing, to a large extent, the great industrial prosperity which Providence has placed within the reach of this nation, the undersigned would gladly support any wise legislation which would tend to restrict, within proper limits, the use of alcoholic beverages, and gradually introduce habits of temperance. **George Burrows, M. D., F. R. S., President of the Royal College of Physicians, Physician Extraordinary to the Queen; George Busk, F. R. S., President of the Royal College of Surgeons, and others.**

## Reviews and Book Notices.

### NOTES ON BOOKS.

—It is announced that the *Medical Gazette*, formerly published in New York city, is to be re-commenced under its former editor, **Dr. ALFRED LUDLOW CARROLL.**

—Messrs. Lindsay and Blakiston of this city announce the following works:

“Earth as a Topical Application in Surgery. With Cases Treated in the Pennsylvania Hospital.” Illustrated by the Photo-Relief process. By **ADDINELL HEWSON, M. D.** 8vo., pp. 300.

“On Syphilis and its Treatment by Subcutaneous Injections of Sublimate.” Translated from the German by **CARL PROEGLER, M. D.,** and **E. H. GALE, M. D.** By Prof. **LEWIN.** 8vo., cloth.

—Prof. **MORGAN** has in press an important work bearing upon the Contagious Diseases Acts, entitled “Practical Lessons in the

Treatment of Affections produced by the Contagious Diseases, with some valuable Experiments in Inoculation” for stamping them out.

—“The Moral of Accidents and other Discourses” is the title of a collection of twelve sermons, which were written, together with introductory and closing prayers, by the late **Rev. THOMAS T. LYNCH,** of London, to be read before his congregation while his intense sufferings from a disease of the heart forbade his personal presence at evening service. The history of their writing would make them interesting if their intrinsic merit did not. It is stated that while at his desk the author would often be seized with such agonizing pains as to be compelled to fling himself on the floor for rest. Before the prayers for the twelfth sermon could be written, the hand of the writer was stilled by death. The work is edited by **SAMUEL COX,** and published by **George Routledge & Sons.**

### BOOK NOTICES.

**A Practical Treatise on the Diseases of Women.** By **T. GAILLARD THOMAS, M. D.,** etc. Third edition, enlarged and thoroughly revised, with 246 illustrations on wood. Philadelphia: **Henry C. Lea,** 1872. 1 vol., sheep, 8 vo., pp. 784.

**Dr. THOMAS** may justly congratulate himself on the reception which his work has received by the profession. That a third edition should be called for in less than three years is strong testimony in favor of its meritorious preparation.

The addition to the present volume amounts to nearly one-fourth as much as the previous edition. Several new chapters have been introduced, and both the views and nomenclature of the author have undergone modifications, such as he deemed necessary to give greater precision and more accuracy. An example of the latter is the substitution of the term “areolar hyperplasia,” for chronic parenchymatous metritis; this, he claims, describes more truthfully the actual state of the uterine tissues, or, in other words, it represents a permanent effect instead of a temporary cause. The arguments for such alterations are stated forcibly, and will doubtless command the attention of those who make this department of medicine a study.



Numerous additions have been made to the later chapters of the volume, and it has thereby gained almost the importance of a new production. Of the various works in this field of research we have ourselves found Dr. THOMAS' that which we turn to the most frequently and with the most satisfaction.

**Plain Talk about Insanity: Its Causes, Forms, Symptoms, and the Treatment of Mental Diseases; with remarks on Hospitals and Asylums, and the medico-legal aspect of Insanity.** By P. W. FISHER, M. D. Boston: Alexander Moore, 1872. 1 vol., 8vo., cloth, pp. 97. Price \$1.50.

**Animal and Vegetable Parasites of the Skin and Hair.** By B. JOY JEFFRIES, A. M., M. D., etc. Boston: Alexander Moore, 1872. 1 vol., 12 mo., cloth, pp. 102. Price \$1.00.

**Small-Pox: The Predisposing Conditions and their Prevention.** By Dr. CARL BOTH. Boston: Alexander Moore, 1872. Paper, pp. 50. Price 25 cents.

These works, as diverse in subject matter as in merit, we group together, as they are all addressed to the public and not to the profession, and are all issued from the publication office of a popular hygienic journal.

Dr. FISHER, who was formerly attached to the Boston Hospital for the Insane, and who is the author of the ingenious application of the *formateur* in use among hatters to the mensuration of the human cranium, says in his preface that he aims to exhibit insanity in its true light as a disease, and to encourage efforts for its prevention as well as its cure. He is quite correct in his belief of the need of popular instruction on this subject. The public are slow in understanding that insanity means brain disease, and there is a vast amount of nonsense still received about "lettres de cachet" and "private mad houses." The author describes the causes, forms and symptoms of insanity, then proceeds to its moral and medical treatment at home and in hospitals and asylums, concluding with some chapters on the medico-legal aspects of the disease.

The information given, and the views throughout were such as will meet the cordial approbation of physicians, and are well calculated to be of real service to the general reader. The amount of mischief done by an

ignorance of the proper management of the insane, especially in reference to forcible measures for their cure, is enormous, and what the community requires is enlightenment on the character of the disease and the nature of asylums.

We doubt, however, whether Dr. FISHER has made sufficient allowance for the prevailing ignorance of medical terms among general readers. Most of them, we predict, will have no idea of the meaning of such words as paresis, cerebral, subacute, etc., familiar as they seem to our eyes; and they are repellant to those who would be benefited by the perusal of his pages.

The same criticism may with justice be applied to the next work on the list, the otherwise most excellent treatise on parasites by Dr. B. JOY JEFFRIES. He divides his subject into animal and vegetable parasites of the human skin, and false parasites of the human body. While sound and instructive in contents, the volume is much better adapted for professional men than the class for whom we suppose it intended—the average non-medical reader. Such words as sebaceous, epilation, nodular, etc., are above the ordinary American's vocabulary. It is also doubtful whether washes containing corrosive sublimate in solution, as that recommended on page 85, ought to be advised for domestic purposes. The home treatment of disease should not include in its materia medica dangerous drugs.

In connection with two such able and sensible works, we are astonished to find associated the silly pamphlet on small-pox, whose title we give. Its author is principally known to us as advertising himself to be the exponent and sole living professor, so far as we know, of the method of curing consumption by the "artificial calcification of tubercles." But we now find that he has discovered an absolute prevention of small-pox, scarlet fever, measles, etc. And what is this? Why, *eating salt*. This profound discovery he substantiates by no less extraordinary arguments in which his physiology is as novel as his hygiene. Small-pox, he says, can originate at any time in a man whose blood is not salt enough. Alcohol frees the blood from salt, and this is why those tipp'ers, the Indians, are all dying with small-pox. People who live on salt fish never take the disease. But he adds that too much salt produces scurvy, evidently ignorant that this venerable theory was long ago relegated to the lumber-room of science. How such a writer comes to us in the company of such men as Dr. JEFFRIES and Dr. FISHER, we are at a loss to surmise.

## MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, MARCH 9, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

Medical Society and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence News, etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observations will be liberally paid for.

To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

### ON QUARANTINE REGULATIONS.

A timely and judicious paper on this subject was recently read before the Medical Library and Journal Association of New York city by Dr. ALFRED L. CARROLL. He exhibits in strong and correct colors the inadequate nature of our present quarantine enactments, taking as his sample those of the port of New York.

For instance, he calls attention to the fact that of the dozen communicable diseases caused by organic poisons, only four are by our laws subject to quarantine, and these are: yellow fever, cholera, typhus and small-pox, with the very indefinite addition of "any new disease not now known, of a contagious, infectious or pestilential nature." Scarlet fever, typhoid, nay, even the "spotted plague" itself (which is now even occasionally seen in Egypt), not being "new diseases," are excluded from the category, and may be imported free of duty.

The conclusions he arrived at are as follows:

I. Communicable zymotic diseases depend upon material organic poisons, and although some of them (as plague, cholera, etc.), may appear to be epidemic in certain localities, it is probable that they exist there only by the

retention and recrudescence of their specific contagion; it is almost certain, at all events, that they do not arise spontaneously elsewhere.

II. "Quarantine of observation" should in all instances apply to living beings in whom contagion may remain latent, rather than inanimate substances which may be disinfected at once.

III. Preventive measures should be adapted to the respective modes of contagion of the several disorders, stricter isolation being necessary in the case of those poisons which are volatile enough to be conveyed in the air, or in vapor of water, than with those which are transmissible only by solid or liquid media.

In the discussion which followed the reading of the paper, Dr. LOUIS A. SAYRE gave an interesting account of his localization of the cholera on board the ship *Atlanta*, in New York harbor, in 1856. As this typical example of the principles of sanitary regulations may be new to many of our readers, we shall give an abstract of his remarks.

What especially impressed Dr. SAYRE on first examining the *Atlanta*, was that the disease was confined to the fore part of the long, narrow space between decks. The thirty or forty deaths which had already occurred had all been at this end. This puzzled him, for the space was continuous; its atmosphere seemed about equally offensive in every part, and the men and women were piled, like cordwood, in tier on tier of rough, filthy bunks, from end to end. Close inquiry discovered that the fatal cases had been chiefly among those lying next to the forward water-closet, while neither of the other two water-closets on the same deck appeared to have bred any trouble.

Following the hint of this definite localization, he cleared out a space, say ten feet wide, across the deck; filled it with pans of carbolic acid; stretched a rope across, and forbade all communication between the two ends of the ship. Slight as this barrier would seem, it proved sufficient; and during the time the passengers remained aboard, not a case of cholera occurred aft of the *cordon sanitaire*. Besides this, the suspected water closet was shut up, and all excretions were received into a couple of huge copper kettles, impressed for this service, and partially filled with water covered with an inch or two of oil; they were

disinfected beneath the oil, with carbolic acid, and then thrown overboard.

The oil was used at the suggestion of Dr. RICH, that if a layer of it in the neck of a wine flask would preserve its contents indefinitely, the same means might prevent the escape of any poisonous emanations from the discharges. It had occurred to him that this disinfection of the discharges was, perhaps, one reason why the disease did not spread from the Atlanta by infecting the water about her.

The erroneous and dangerous views on quarantine, based on hypothetical considerations, which have been lately advocated by some prominent writers, render such essays as this of Dr. CARROLL, and such pointed examples as this of Dr. SAYRE peculiarly appropriate, and we hope they will both attract general attention.

#### DOCTORS OF LAWS.

When men venture into lines of thought which demand a special preparatory training without such training, they rarely think clearly. The unexperienced layman who sets about discussing the "origin of epidemics" for example, very surely sets up some patent absurdity instead of a sound theory. All of us are willing to recognize the truth of this example, but few of us see that we ourselves are certain to commit equally marked blunders when we trespass on other professions. The principles of law, for instance, which protect individual rights, are not in the grasp of every tyro, nor of every educated man, but only of those who have toiled for years to master them.

The truth of this is conspicuously manifest in the proceedings of the annual meeting of the State Medical Society of New York, reported in the current volume of this journal, page 152, et seq. In his address the President, Dr. WM. C. WEY, said:

"A spirit has been manifested where we would not have looked for evidence of such disregard of the obligations of professional obedience and discipline, to cut short the process of investigation of preferred charges

against a member, in a properly qualified medical society, by an appeal to the civil courts to restrain the course of the inquiry by a summary injunction. Such a procedure is subversive of morals as well as justice, and effectually puts an end to all attempts to enforce compliance with the salutary rules by which voluntary and chartered organizations are sustained and perpetuated. It strikes at the very root of authority, by first assuming to be loyal and subject to it and afterward rebelling against its power in a way so treacherous and cowardly that but one course is left for a society thus compelled to yield to the interference of the officer of the law, and that is promptly to expel the revolutionary member; or if prevented by additional legal hindrances, to cease to hold social or professional relations with him."

Following out this suggestion of the president, apparently, at a later stage of the proceedings a member offered the following resolutions, which were adopted:

"WHEREAS, the Code of Ethics to which this society and the various county societies acknowledge allegiance, provides appropriate and sufficient means for obtaining redress in all matters of differences between physicians.

"Resolved, That any physician preferring charges, or against whom charges may have been preferred, who shall resort to courts of law or any legal process, shall be considered unworthy of membership in medical societies; and if a member, shall be declared expelled by the president at a stated meeting of the society to which the offender may belong.

"Resolved, That a copy of this resolution be sent to the American Medical Society."

Of course we all know the recent case in New York city which impelled the society to this action; but withdrawing our attention from any one case, let us examine the principle of law and the tendency of legislation here involved.

In the first place, there is a distinctly implied assertion that the laws, the judiciary, and the courts which protect men in all other relations and business of their lives, are utterly inadequate when applied to the relations of physicians! Not only this, but that any physician who believes his reputation, or his business, or his rights as a man and a citizen, are injured by a formally organized society,

shall not dare to invoke those forms, sanctioned by ages, under which justice is secured to all (other) men, under penalty of public repudiation by his associates in business!

Again, the tendency of this resolution is directly contrary to the best recent legislation, as it aims to annul still more completely what insufficient rights are at present vested in legislative minorities. Most sound political thinkers have been engaged in devising schemes by which the minority should be protected, but here is a body of pandits who would make the majority omnipotent!

The preamble, however, states that the "Code of Ethics" (save the mark) provides sufficient means for obtaining redress in all matters of difference between physicians. The naïve simplicity of this statement is delightful. It is true; and so it is also true that the Code of Statute Law of New York State, and the enactments of all civilized countries, provide sufficient means for redressing grievances; but no code and no statutes insist that a court of first instance shall be final, and that an appellant is *ipso facto* condemned. The tendency of law is just the contrary, and the courts and forms of law are precisely the means devised to carry into effect this provision of statutes.

When a minority cannot obtain the redress they demand under the code, or especially if an individual is attacked in his business and suffers pecuniarily, he has an indefeasible right to call to his aid the law of the land. There is no analogy between such cases and those which occur in secret organizations or commercial boards. The former involves no publicity, and the violations of rules taken cognizance of by the latter mean also dishonesty. Medical Societies publish their proceedings, and many of the offenses they punish cannot be construed as misdemeanors, but are breaches of etiquette.

Even the conservative priesthood of the Roman Catholic and Protestant Episcopal Churches do not carry this exclusiveness to

the extent proposed in these resolutions. The appeal to civil law from canon law is not unusual in both, and entails no degradation of the appellant.

If, when a physician joins a medical society, he is forced to renounce the protection which the civil law extends over his reputation, his business and his prosperity, he commits a foolish action; and if societies, which pretend and ought to be scientific and protective, adopt such rules, they sign their own death warrant. If they do not violate the law they need not be afraid of it.

## Notes and Comments.

### A Censor Wanted.

We quoted, not long since, an article from the transactions of a State Medical Society. Some friend has since sent us a paper with a staring advertisement of "Anti-bilious Pills" by the author of the article. We are profoundly astonished that a State Medical Society allows one of their members thus to play the quack in open defiance of every rule of ethics; and if the society in question does not reform itself in this particular, it cannot retain its standing with its sister societies.

## Correspondence.

### DOMESTIC.

#### Treatment of Anemia.

#### EDS MED. AND SURG. REPORTER:

IN THE MEDICAL AND SURGICAL REPORTER of February 10, 1872, is a case reported by Dr. GEORGE A. WAY, M. D., in which I feel much interested. The doctor calls it a case of leucocythemia, and perhaps such it was. But what is leucocythemia? This condition of the blood is probably yet unexplained. The white corpuscles may yet be imperfect red ones, and no doubt unmetamorphosed chyle-corpuscles are frequently formed in the blood.

On my graduation in medicine, in the spring of 1837, I, as most young men and sanguine physicians, had all the diseases "which flesh is heir to," well defined and standing out prominently before my mind. I only wished an opportunity to stand at the bedside of the



sick, diagnose the disease and make my curative power manifest at once. Since then my wish has been abundantly gratified, and I have practically learned that "Distance lends enchantment to the view." I have found disease at the bedside differ very much from that I heard in the lecture-room, or read in the books. Yet without the lectures and the books what a Don Quixote of a doctor I would have been. My Rosinante might probably have been more frequently in requisition; but my prescriptions would have been as wild as the mad knight's encounters. I regard this case of Dr. WAY's as one almost of child murder from educational stuffing.

This little girl should have been taken from school, or her mental labor much reduced, months before she came under the doctor's notice. In these anemic cases experience has incontrovertibly shown that the ferruginous preparations are our main reliance. Of course adjuvants and a nutritious diet must by no means be neglected. And just here let me say that the miserable "slop," called beef-tea holds a much higher place in the diet of the sick than it deserves. It contains comparatively no nourishment, and prepared by the most dexterous or intelligent nurse, is at best but a nauseous dose.

I have had some anemic cases in my practice. A little girl, five years old, came under my care, some two years since, with many symptoms similar to Dr. WAY's case. She was a child of lymphatic temperament, full habit, and for more than a year had been assuming a more and more pale appearance. She lived in a malarial district, and had chills. She was passing large quantities of limpid urine, but neither saccharine nor albuminous. Her legs and feet pitted on pressure. She had been under treatment, but I do not know what kind, till the doctor got tired of his case and abandoned it.

I took charge of the case, and my patient got well, and has now been in the enjoyment of robust health more than a year. My treatment for this case was principally tr. ferri. chloridi, and quinine sulphas; occasionally intermitted with Fowler's solution, which I think had much agency in breaking up the chills. My patient had no neuralgia, and I think in Dr. WAY's case a few hypodermic injections, of a 1-12 or 1-16 grain of sulphate of morphia, would have cured that pain "over the frontal eminence of right side of forehead." It was unfortunate that a *post-mortem* was not made as that, quite likely, would have dispelled the phantom of a tumor of any kind.

Respectfully, &c.,  
L. G. MORLEY.

Wooster, O., Feb. 28, 1872.

**The Bites of Venomous Snakes.**

EDS. MED. AND SURG. REPORTER:

In looking over the REPORTER of January 27th I was much pleased with the remarks of Dr. TODD on ammonia in poisoning, and I

was especially amused with his bachelor snake story. Having had a considerable number of snake bitten patients since I've been in the medical profession, I too, have a few "snake stories" (and one about a bachelor), some of which I will give, subject to your disposal.

While I was a student of medicine in my father's office I knew a young man who was bitten by a water-moccasin under water, and died from the bite. He and some of his neighbors were fishing with a seine, and while hauling the seine in water four feet deep, he stepped upon something and felt it sting his foot. Drawing himself up by the pole of the seine, the snake was coiled around his foot and ankle with its fangs still fastened in the flesh above one of the larger veins of the foot. My father was immediately sent for, but the young man, who lived some eight miles from us, died before his arrival, thus proving two things—that the moccasin is more poisonous than is generally supposed, and that he can inflict a deadly wound deep down under water. Another remarkable case occurred in my own practice, in the month of February, 1866. The circumstances were as follows:

A young man who was clearing new ground, after removing all of the best timber, put the brush and useless logs in large heaps, and burned them. Near one of these burning heaps was a large hollow stump in which a venomous old copperhead was whiling away the frosty hours of winter, enjoying his *otium cum dignitate*, with all the stolidism of a torpid state. The old fellow felt the life reviving power of the heat, and supposing that sol was again shedding the rays of summer's warmth for his especial benefit, he roused himself from his lethargy, and gliding slowly from his winter quarters, coiled himself up near the fire, where he basked as happy as a king. Just before bedtime, as is usual, the young man went out to mend up his heaps for the night, and while in the act of picking up some pieces of brush, was bitten in the finger by the copperhead. It was by far the worse case I have ever seen, though the bite was inflicted in very cold weather.

The symptoms in this case were especially alarming. There was great prostration of the system, with intermittent pulse, dilated pupils and a feeling of intense oppression about the heart; and I was fearful for several days that he would die; but after enduring extreme suffering he finally recovered. During the same year I had three more cases bitten by copperheads, and among them one of my own children, a little girl two years old, who was bitten in the palm of the right hand and barely escaped with her life. Here allow me to ask a question which has often suggested itself to my mind. Has the bite of a venomous serpent, inflicted in early childhood, any tendency to dwarf the growth of the child? I have seen several instances of vigorous children in whom growth seem to have been

arrested or at least greatly retarded from the time of the bite.

Besides these cases I have seen many more bitten by copperheads, and other poisonous snakes, but the only fatal case which has occurred in my own, or my father's practice, was the one mentioned above.

My treatment is by no means a new one. Sometimes I excise the wound, but more frequently enlarge it by free incisions, and then apply a cupping glass as speedily as possible over the wound, and re-apply as long as the blood runs freely. In the meantime I never neglect to bandage the limb firmly above the wound, and administer brandy or whisky and the aromatic spirits of ammonia freely internally. I also use the dilute aqua ammonia locally either in the form of a cataplasm (as spoken of by Dr. TODD), or by thick layers of lint or linen cloth saturated with it and covered with oiled silk. The copperheads which inflicted bites upon the genital organs of the old bachelor near Wheeling, Va., were ignorant of the Divine promise "the seed of the woman shall bruise the serpent's head;" at any rate their actions in this particular instance were exactly *vice versa*; however, *entre nous*, allow me to remark that I very much admire their good taste and judgment in discriminating so justly in favor of married men.

Now then for my bachelor snake story, and I am done. In the fall of 1864 I saw an old bachelor who had been bitten by a copperhead. The case was not a serious one, and the man recovered finely; but they say the snake died in less than one hour after he bit the bachelor; however, I cannot vouch for the truth of this, as I only saw the man.

R. L. PAYNE, M. D.

Lexington, N. C., Feb., 1872.

#### Gynecological Practice.

EDS. MED. AND SURG. REPORTER:

In your issue of February 10th I find an article from the pen of Dr. BARNSON, of Salem, N. C., upon the subject of gynecology; and as the whole thing seems to have been conceived in a hostile feeling to an article of my own, which appeared in the REPORTER of December 23, 1871, signed "Medicus," I beg permission to offer a word in reply.

As there seems to have probably been some misapprehension of my position by the above mentioned writer, as regards the pursuit of gynecological practice, I may be allowed to say that when the matter is in scientific hands, conducted by men who have a proper appreciation of its importance, there is no department of medical and surgical science more legitimate or more conducive to the welfare of suffering humanity.

That posterity will honor the names of MEIGS, SIMS, STORER, ATLEE, EMMET and THOMAS, equally with those of GROSS, BEDFORD, HAMILTON and DICKINSON, I make no

doubt. It is not to gynecological science and practice, nor to names like those above, that my remarks of December 23d were intended to apply, but to a class of mercenary scoundrels who set themselves up as general practitioners, one of whom may be found in almost every neighborhood, who, to hide their ignorance of the real nature of maladies they are called to treat, are glad to satisfy the morbid credulity of many of their patients by a grave declaration that they have "the falling of the womb," "the womb disease," etc. I am personally cognizant of more than one such professional parasite; and those who, as before stated, are looked up to by the community as men of wonderful genius. The practitioner (I will not call him doctor) is here the culpable party, and I think it doing God's service to warn an unsuspecting public against their nefarious machinations.

In conclusion, I can assure the doctor that my estimate of the character of gynecological treatment and practice, and the estimate which should be placed upon the efforts of the "Gynecological Society of Boston," ought to be as proper subjects for my eulogies as for his own, as I have the honor of being "part and parcel" of said society, holding membership since its earliest organization.

Hoping that the criticisms on my former article will be to the readers of the REPORTER my sufficient excuse for thus detaining them with this rather personal effusion, I am yet their friend,  
J. P. CHESNEY.

St. Joseph, Mo., Feb. 18, 1872.

#### NEWS AND MISCELLANY.

##### The O. Æ. Society.

A large and brilliant assemblage of beauty and fashion greeted the society of the Order of Æsculapius at their eighth annual reunion, on Monday evening, February 26th, 1872, crowding the capacious theater of Bellevue Hospital Medical College to its utmost capacity. Long before the hour appointed for the commencement of the exercises "standing room" was at a high premium.

The O. Æ. Society was originated in the year 1863 by some of the students of Bellevue, and had for its object the promotion of study and the discussion of matters medical and scientific. It soon attracted the favorable notice of the faculty, from whom it received much valuable assistance, and it now numbers many hundred members, most of whom are Alumni of Bellevue College. Two qualifications are necessary for admission to the society, viz.: To be of good moral character and a student of Bellevue.

The following programme comprised the order of exercises:

Grand March; Piano.

Invocation by the chaplain: Alfred B. Beach, D. D.

President's Salutation, J. Wallace Whimsie, M. D.

Aria, Lucia da quest Anima, Mme. Alfred.  
Honorary Address, Rev. Geo. H. Hepworth.  
Solo: The heart bowed down, Mr. E. J. Post.

#### INSTALLATION OF OFFICERS.

President—J. Wallace McWhinnie, M. D.  
1st Vice President—William Carr.  
2d Vice President—H. G. Bidwell.  
Recording Secretary—Willis J. Estep.  
Corresponding Secretary—S. Hemingway.  
Treasurer—S. P. Hammond.

Duet (by request) Master and Pupil: Madame Alfred and Mr. C. Anderson.

#### SENTIMENTS.

"Our Alma Mater:" Leroy Milton Yale, M. D.

Piano Solo: Mr. W. R. Johnston.  
"The Faculty:" Prof. Wm. T. Lusk, M. D.  
Song—"The White Squall": Mr. E. J. Post.  
"The Class of '71": S. P. Hammond.  
Temperance Medley—"The Green Mountain Yankee": Mr. C. Anderson.

"The O. Æ.": Ramon Amabile, M. D.  
Aria—"Robert toi que j'Alme": Mme. Alfred.  
"The Ladies": Prof. A. B. Crosby, M. D.  
The Trio—"Te sol quest Anima": sung in a splendid manner by Madame Alfred and Messrs. Anderson and Post, closed the entertainment.

#### The Diploma Traffic.

The investigation into this disgraceful trade was continued on February 17th. We extract the following brief summary of the evidence elicited from an editorial in the *Public Ledger*, February 21:

One of the witnesses, who either is or has been a "professor" in one of them, and who seems to have had intercourse with both, when asked if he knew anything of the sale of diplomas, or if Dr. Paine had ever asked him to sell diplomas as agent, or if he was ever present when Paine offered to sell diplomas, refused to answer on the ground that he might "criminate himself." This same witness, however, subsequently admitted that he had had blank diplomas of both Paine's and Buchanan's establishments in his possession; was about to make the selling of diplomas a business before the passage of the late act of Assembly making it a criminal offense; that he had never sold but one, but that he would have signed one of them "quicker than a wink," if he could have made money by it.

Buchanan, of the Pine street establishment, admitted that one of his degrees had been sent to Schuylkill county to a man who had not appeared for examination, said man having afterward made a donation of \$25; and

that another man in Huntingdon county had received a degree after a two week's course, and on the presentation of tickets for lectures he had attended elsewhere! Paine admitted that diplomas had been issued from his concern after attendance upon one course, in cases where the recipients had already practiced medicine for a long time! Another witness, one of these broods of "doctors," testified that he had bought a scholarship for \$75, in the Philadelphia (Paine's) University; thought that the scholarship entitled him to attend when he pleased, could not tell anything about his attendance, wrote no medical thesis, passed no "regular" examination; but he got his diploma. Another testified to his knowledge of a diploma having been issued by Paine for \$70, to a man who had attended no course of study. Still another, "an herb doctor," a colored man, testified that he had never attended any course of lectures, but had received, through a Dr. Bissell, from Dr. Buchanan a diploma as "a mark of honor"—but a political campaign was then going on, and one of these doctors was a candidate for the Legislature. Yet another, also a colored man, had been favored with a Paine diploma, which was hung up in his office during his absence; and yet another had received a Buchanan diploma after attending one course, but he had been practicing for twenty years before that.

But the most extraordinary portions of this testimony yet remain to be told. A "doctor," who described his business to be "studying and practicing medicine," mentioned among his qualifications that he had been "janitor for seven years" in a Baltimore medical school; he also had a diploma from a botanical college in the West Indies, and intended to get another from Buchanan, but that the latter charged too much! This, however, does not equal the evidence of James McShane, who has been some sort of an attendant in the dissecting room of both the "Philadelphia" and the "Eclectic."

He says he "worked" for Dr. Paine, and "did some work" for the "Eclectic;" he was no graduate, but in Paine's establishment he sometimes "ran the dissecting room," and "acted as teacher;" he was also offered a professorship in the American University, then at Tenth and Chestnut, and a "Professorship of Anatomy" in the "Eclectic." He had been offered diplomas to sell, and had been asked by Dr. Paine to teach.

Such are specimens of the abuses which the REPORTER has repeatedly brought before not merely the profession, but the deans and professors of the regular medical colleges in this city, and have urged their correction over and over again, but we are sorry to say fruitlessly. The supineness of those who should have united to put a stop to this traffic long ago must be now to all a matter of extreme regret.



### The Hotel Dieu, Paris.

One of the most ornamental of the public buildings, so lavishly ordered by the late Imperial Government in France, has just been condemned as unfit for its purpose. It was a new erection for the chief hospital in Paris, and its total cost was enormous; but the Society of Hospital Physicians and Surgeons has unanimously resolved that, in its construction, it does not fulfill the conditions required by a hospital in the present state of scientific and hygienic knowledge. Two members of the society proposed the reduction of the eight hundred beds to four hundred, and using them for the reception of patients suffering with skin diseases, thus utilizing the building, but vitiating the scheme of a general hospital. This proposition has been negatived, and some alterations to the costly structure must be made, casting an additional burden on the citizens of Paris.

### Destruction of Scientific Collections by the Chicago Fire.

Dr. J. W. FOSTER and Mr. WILLIAM STIMPSON, respectively the President and Secretary of the Chicago Academy, have circulated a report of the losses sustained by their valuable institution in the late conflagration. Among these are some collections of national importance, such as that made by the Audubon club, the entomological collection of Mr. B. D. Walsh, the illustrations of the natural history of Alaska, the Smithsonian *crustacea*, and many others of more or less importance. With characteristic energy and courage, the trustees have announced the intended reconstruction of the buildings, and the recommencement of the publication of the Transactions of the Academy.

The large general collection, illustrating American natural history, was one of the most extensive and complete in this country, and great efforts will be necessary to replace the specimens. Assistance from the museums of Europe, many of which have duplicates, may be relied on; and similar institutions in the United States would do well to help, with all their power, the noble collection of the Chicago Academy, now struggling to regain her position and renown among the *almæ matres* of science in America.

### A Novel Surgical Operation

was recently performed by a San Francisco physician. The patient had been shot. The bullet entered the right side, a little above the hip, and in probing the wound the surgeon discovered where the bullet lay. He was compelled to enlarge the orifice of the wound in order to introduce the forceps, and had just got that instrument on the bullet, when the wounded man, who was under the influence of liquor, struck him a powerful blow on the side of the head, which caused him to fall to the

floor. He then ran away, and when the doctor recovered himself, he found the forceps in one corner of the room and near the instrument was the bullet, which had been extracted by the force of the blow. The doctor says that as a surgical operation it was a complete success, but still he is not partial to the method.

### Antidote to Carbolic Acid.

The use of carbolic acid as a disinfectant, now so common everywhere, is fraught with danger, as it is a virulent poison; and if it be accidentally taken internally, an effective antidote will be necessary. Dr. HUSEMANN, of Göttingen, suggests, for counteracting its effects on the stomach, a new preparation, which he calls *calcaria saccharata* (saccharate of lime), prepared by dissolving 16 parts refined sugar in 40 parts water, and adding 5 parts slaked lime. Digest the mixture for three days, stir occasionally, filter and evaporate to dryness.

### QUERIES AND REPLIES.

Dr. G. M. G., of Ohio, sends a catalogue of a so-called Medical College of this city, with a matriculant list of over three hundred and fifty, and a graduating class of over one hundred, and asks if it is a legitimate college or a humbug. In the first place, we have never heard of even one hundred students being in attendance on its lectures—and as to its graduating class, we really believe it is much larger than its class of *bona fide* matriculants. The modus operandi of the whole concern will probably be made public in the report of a Committee of the State Legislature into certain alleged irregularities in conferring diplomas on the part of some institutions of this city. One thing, however, we can inform our correspondents—"degrees" are not worth the paper they are written on.

### MARRIAGES.

BISHOP—WELLS—February 20, 1873, at the residence of N. Wells, M. D., at Meshoppen, Pa., by Rev. S. F. Colt, Mr. Joseph W. Bishop, of Towanda, and Miss Mary H. Wells, of Meshoppen.

FITZGERALD—McCORKLE—At Columbia, Pa., February 1, by Rev. Dr. R. Owen, Dr. J. A. Fitzgerald, U. S. A., and Emily L. McCorkle, daughter of the late Dr. William S. McCorkle, of Columbia.

GORDON—MARSHALL—February 15th, at the residence of the bride's father in Georgetown, Ohio, by the Rev. S. N. Maish, Dr. S. C. Gordon and Olivia, daughter of Wm. S. Marshall, all of the above place.

SLATE—WRIGHT—February 15th, in the Broadway Methodist Episcopal Church, of Baltimore, Md., by the Rev. James H. Brown, D. D., Hyman A. Slate, of Williamsport, Pa., and M. Virgie Wright, only daughter of J. W. Wright, M. D., of Baltimore, and granddaughter of Dr. Matthew Grier, deceased, formerly of Williamsport.

WALLACE—SCOTT—At the residence of the bride's mother, near New Baltimore, Ohio, February 23d, 1873, by the Rev. D. E. Myers, Dr. W. H. Wallace, of New Haven, Ohio, and Miss Albina Scott, daughter of the late Andrew Scott.

### DEATHS.

BLACKWOOD.—At her residence, at Haddonfield, N. J., on the 29th ult., Mary Ann Blackwood, widow of the late Dr. B. W. Blackwood, in the 66th year of her age.

BLISS.—In New York, February 28th, Caroline, infant daughter of Harriet M. and Charles Bliss, M. D., aged 15 days.

BURD.—In this city, March 4th, of pneumonia, Lilly Twigg, wife of Dr. J. P. Burd, and daughter of Edward Shippen, Esq., in the 22d year of her age.

HAWES.—On the 2d inst., at his late residence, in Brooklyn, N. Y., Dr. John Hawes, in the 69th year of his age.

WELCH.—At Crab Orchard, Ky., February 10th, Dr. Thomas Welch, aged about 67.